

# PATENT SPECIFICATION



Application Date: March 24, 1938. No. 9023/38.

512,989

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Complete Specification Accepted: Oct. 2, 1939.

## PROVISIONAL SPECIFICATION

### Improvements in and relating to the Manufacture of Slide Fasteners

I, THOMAS LEWIS SHEPHERD, of 7, Park Lane, London, W.1, a British Subject, do hereby declare the nature of this invention to be as follows:—

5. This invention relates to slide fasteners and to new methods in using same in the making up of articles of wearing apparel.

The usual known type of slide fastener is made up of two components, one a 10 double row of serrated teeth fixed to tapes and the second a slide device which may be moved up and down in order to close or open the fastener by either drawing the serrated edges together or allowing them 15 to become free.

This slide device which is known as a "puller" may be of the locking or non-locking type; in the former case the pulling lever of the "puller" may have a 20 small tooth which engages in the teeth of the fastener and prevents same being moved until withdrawn.

A disadvantage of the above fasteners when worn next to the skin is that the 25 latter is liable to be trapped between the serrated teeth and the slide device when the fastener is being opened or closed. This disadvantage is also to be found—but to a lesser degree—when the fastener is 30 worn over other garments; in this case the under-garments are liable to be trapped and torn when opening or closing the fastener.

One object of the present invention is 35 to eliminate the disadvantage just described, this being effected by fixing a shield, disc, or plaque to the sides or base of the slide device or by extending the base of the slide device itself to form a 40 shield, disc, or plaque. By this means a small gap is provided between the slide device and the serrated teeth which prevents the latter from coming into direct contact with the skin or under-garment.

The shield or disc can be of the same 45 material as the slide device, e.g. metal, plastics, india rubber and the like or it can be of any suitable material either rigid or flexible having smooth edges and surface and capable of preventing impact 50 between the fastener and the skin or under-garment at any point to which the slide device may have occasion to be drawn. Similarly the shield or disc may be of any shape desired providing it overlaps the actual working base of the slide device both at the bottom and the top and it may be either flat or it may be rounded 55 convexly or concavely as desired.

Another object of the invention is to 60 use the slide device or puller itself as a means of holding or fastening additional articles of clothing which may be worn over the garment to which the slide fastener itself is affixed. To this end a 65 button, stud or other type of fastener may be fixed to any part of the shield or disc either permanently or temporarily. For instance in the case of a shirt which is fastened up the front, a stud may be fixed 70 to the upper part of the shield so that when the slide fastener is closed this will be in the normal position of the neckband and a collar may be attached in the ordinary way but without the necessity of passing the stud through the ends of the shirt band also, as this is sufficiently held 75 together by the slide fastener. Apart from simplifying dressing and undressing this leaves more freedom to the neck particularly in the case of neck band shrinkage or increase in the size of the neck itself. Providing the ends of the neckband are extended suitably and buttonholed the 80 stud can of course be passed through these 85 holes if desired.

Dated this 24th day of March, 1938.

MARKS & CLERK.

## COMPLETE SPECIFICATION

### Improvements in and relating to the Manufacture of Slide Fasteners

I, THOMAS LEWIS SHEPHERD, of 7, Park Lane, London, W.1, a British Subject, do hereby declare the nature of this 90 invention and in what manner the same is

to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to slide fasteners

for fastening articles of wearing apparel. The usual known type of slide fastener is made up of two components, one a double row of serrated teeth fixed to tapes 5 and the second a slide device which may be moved up and down in order to close or open the fastener by either drawing the serrated edges together or allowing them to become free.

10 This slide device which is known as a "puller" may be of the locking or non-locking type; in the former case the pulling lever of the "puller" may have a small tooth which engages in the teeth of 15 the fastener and prevents the same being moved until withdrawn.

15 A disadvantage of the above fasteners when worn next to the skin is that the latter is liable to be trapped between the 20 serrated teeth and the slide device when the fastener is being opened or closed. This disadvantage is also to be found—but to a lesser degree—when the fastener is worn over other garments; in this case 25 the under-garments are liable to be trapped and torn when opening or closing the fastener, and in order to overcome this disadvantage the sliders have been provided with guards at the back thereof so 30 as to prevent obstructing material from being caught up by the engagement or disengagement of the teeth of the fastener.

35 The invention relates to the latter type of fastener and consists in a slide fastener 35 with teeth or elements which are interengaged by means of a slide device or "puller", and having a shield, disc or plaque so as to form a clearance between the back of the slide and the interengaging 40 teeth, the shield, disc or plaque being provided with a button, stud or like fastener for the purpose of holding or fastening additional articles of clothing, which may be worn over the garment to which 45 the slide fastener itself is affixed.

45 The shield, disc, or plaque may be fixed to the sides or base of the slide device or by extending the base of the slide device itself to form a shield, disc, or plaque. 50 The small gap which is provided between the slide device and the interengaging teeth of the fastener prevents the latter from coming into direct contact with the skin of the wearer or under-garment.

55 The shield or disc can be of the same material as the slide device, e.g. metal, plastics, india rubber and the like or it can be of any suitable material either 60 rigid or flexible having smooth edges and surface and capable of preventing impact between the fastener and the skin or under-garment at any point to which the slide device may have occasion to be drawn. The shield or disc may be of any 65 shape desired providing it overlaps the

actual working base of the slide device both at the bottom and the top and it may be either flat or it may be rounded convexly or concavely as desired.

For instance in the case of a shirt which is fastened up the front, a stud may be

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fixed to the upper part of the shield so that when the slide fastener is closed this will be in the normal position of the neckband and a collar may be attached in the ordinary way but without the necessity of passing the stud through the ends of the shirt band also, as this is sufficiently held together by the slide fastener. Apart from simplifying dressing and undressing this leaves more freedom to the neck particularly in the case of neckband shrinkage or increase in the size of the neck itself. Providing the ends of the neckband are extended suitably and button-holed as described in the specification of my co-pending Application No. 12301/39 (Serial No. 513,026) the stud can of course be passed through these holes if desired.

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Referring now to the accompanying drawings which illustrate the invention by way of example:—

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Figure 1 and Figure 2 represent a back and front view respectively of a slide fastener having a shield and provided with a button, stud or like fastener in accordance with the invention.

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Figure 3 and Figure 4 represent a side and front view of the slide device.

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In the drawings like references are used to denote like parts.

95 Referring to the drawings the slide device *a* having the usual puller *d* is provided at the back thereof with an oval shaped shield *b* which is slightly turned over at the top and bottom as shown. By this means the interengaging teeth *c* of the fastener are prevented from coming into contact with the skin of the wearer or under-garment by being held away therefrom so that the skin or under-garment cannot be caught up between the teeth when the slide is operated for closing the fastener.

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The shield *b* is provided with a collar *c*, this fastener being intended for use with a shirt to which a collar may be attached.

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Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

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1. A slide fastener with teeth or elements which are interengaged by means of a slide device or "puller" and having a shield, disc or plaque so as to form a clearance between the back of the slide device and the interengaging teeth, which prevents the latter from coming into 115 contact with the skin of the wearer or under-garment.

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2. A slide fastener with teeth or elements which are interengaged by means of a

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slide device or "puller" and having a shield, disc or plaque so as to form a clearance between the back of the slide device and the interengaging teeth, which prevents the latter from coming into 130 contact with the skin of the wearer or under-garment.

direct contact with the skin of the wearer or under-garment, the shield, disc, or plaque being provided with a button, stud or like fastener for the purpose described.

5 2. The improved slide fastener substan-

tially as described with reference to the accompanying drawings.

Dated this 20th day of April, 1939.  
MARKS & CLERK.

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*[This Drawing is a reproduction of the Original on a reduced scale.]*

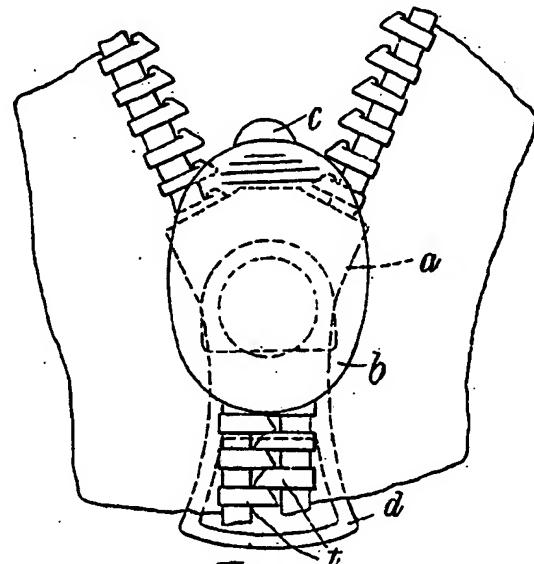


Fig. 1.

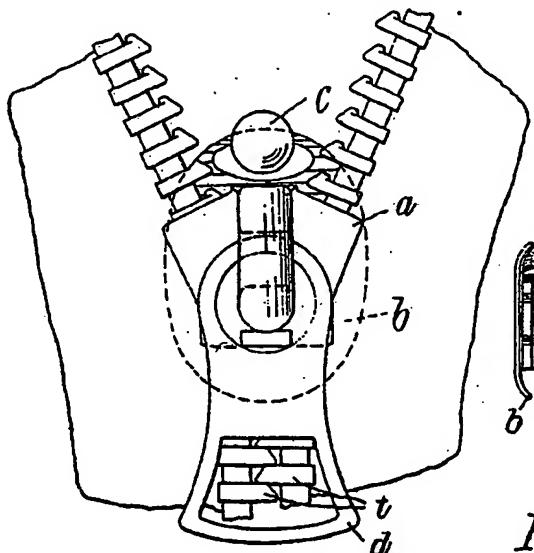


Fig. 2.



Fig. 3.

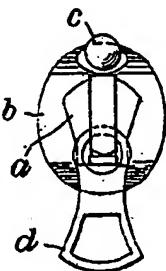


Fig. 4.